DEVOTED TO NAVIGATION, COMMERCE, ENGINEERING AND SCIENCE.

VOL. XI. NO. 22. CLEVELAND. O., MAY 16 1889. $2.00 PER ANNUM SINGLE COPIES 5 CENTS

Bel Isle & Windsor Ferry Co. 68

AROUND THE LAKES.

CLEVELAND, OHIO.

The Johnson steamer, building at the yard of the Cleveland drydock company, will probably be launched on Saturday afternoon.

The new steamship Cayuga built by the Globe iron works company on the Lehigh line will get away this week with flying colors.

A survey of the Australasia was made Tuesday by Captain Wallace and Captain Murphy and their report will be made in a day or two. The cost of repairing the big boat will certainly be very heavy.

While at work on the schooner McGee in the old river bed Monday, a sailor fell from a spar to the deck, a distance of thirty five feet, and sustained a broken leg and rib. He was taken in Hogan & Harri's ambulance to Lakeside hospital.

At the Cleveland drydock company's dock the schooner Kent had her bottom calked; the schooner Owasco bottom calked; the steamer Continental had a leak stopped and stern bearings fixed. As usual on patriotic occasions the drydock has made a flag staff for the soldiers, monument for memorial day and decorated it with the stars and stripes.

Harbor Master Schiely has requested the council to cause the placing of gates at the Main and Seneca street bridges. Both the bridges are at the foot of steep hills, and as the bridges are now swung rapidly by steam there is danger that teams will fall into the river. The business men along the river are strongly in favor of the plan, and it is likely to be adopted.

The boiler shops of the Cleveland ship building company are well supplied with orders to keep all hands busy throughout the entire summer, consisting of two boilers 72 inches diameter by 25 feet long, for V. D. Andrews & Son, eight boilers 72 inches diameter by 18 feet tong, for Fraser & Chalmers, and one boiler 48 inches diameter by 12 feet long, for J. H. Sargeant.

We had the pleasure of meeting Mr. C. Schofield, Wyandotte, Mich., who was spending a few days in this city visiting Superintendent Bristow, of the Cleveland ship building company, and other friends. We understand that Mr. Schofield will shortly leave Wyandotte to accept a position in West Bay City, presumably in connection with the iron shipyard plant now being fitted up there.

The vessel owners of Cleveland recently presented Captain N. Bartlett, "the only good man at the wheel" with the boat Uncle Sam. The worthy captain now talks of putting a propeller wheel on her in order that he may, during pleasant weather, make daily trips between this port and Rocky river. He thinks that she will carry 300 people with safety, and says she is a floating palace. Everything is comparative, however.

With a full month of active operation in the present season of navigation some important features in the situation are of interest, not least among which is the low stage of water that has prevailed. It is generally admitted that unless there is an increase in water the carrying ability of the lake fleet for the whole season will be reduced 10 per cent, as compared with a year ago. Such a reduction would mean a decrease on last year's ore trade alone of about 500,000 tons. While it must be admitted that the new boats on the lakes will do a large part of the carrying business, the fact that the increase in tonnage has been discounted in freights must not be lost sight of. The detention, too, is unusual, the fleet being grouped all along. The bulk of the ore carriers is at lower lake ports now, and at Erie and Ashtabula, Fairport and Cleveland the jam is annoying.

"The mills of the Gods grind slowly, but they grind exceeding fine: It has been a long time since we have been called upon to say anything relative to the Smith pneumatic elevator but now that it has become a powerful standard in the land we may say that it will in all human events replace many of the obsolete systems. A strong company has been organized which will devote attention to the construction of other Cyclone barges and storage capacity. The form of tank that would combine strength and simplicity of construction, would be the cylindrical, with roof or cover the form of an oblate spheroid. The bottoms if made of concrete, as contemplated when the tanks are placed on the ground, may be in a plane with the bottom or may be concave or depressed, which would increase capacity and facilitate handling, as the grain would tend to a common center. Plate bottoms may be of any form desired from a horizontal plane to any angle of depression. Smaller tanks may be constructed in the form of hexagons, and arranged in clusters, so that all intermediate partitions would form walls for two distinct compartments, or any form may be adopted that is best suited to the conditions, the space to be occupied, or the work to be done, because no peculiarity of form is demanded, and the machinery for handling can as readily be attached to any of all forms as to any particular form of a class.

The following has been furnished by the Detroit & Cleveland steam navigation company, relative to the service of the steamers of that line: On the Lake Erie division the steamers City of Cleveland and City of Detroit will leave Cleveland at 9:30 p. m., Detroit at 10:15 p. m., arriving at ther destination at 5 a. m. The service is daily except Sunday, but from June 1 until October 1, Sunday night trips will be made. On each Wednesday from June 19 until August 28, steamers will make daylight trips via Put-in-Bay, leaving either city at 8:30 o'clock a. m., arriving at the other at 6:30 p. m. The Lake Huron service will not be changed from last year; steamers leaving Detroit at 9 a. m. on Wednesday and Friday, and 10 p. m. Monday and Saturday, arrive at Mackinac about thirty hours later. The steamer City of Detroit, which for some years past has performed the service between Detroit and Cleveland, will be placed on Lake Michigan about June 1, and will ply between Chicago and St. Joseph, Mich. She has received an electric light plant, new dining-room, and has otherwise been greatly improved. During the greater portion of the season she will make one round trip per day, in the interest of the fruit business at St. Joseph. During the heated term two round trips will be made. It is expected that the Chicago people will not be slow in seizing this, their first opportunity, to take safe and really enjoyable lake excursions.

EAST SAGINAW, MICH.

The largest wooden steamer for the great lakes now on the stocks at Captain James Davidson's shipyard, West Bay City, is being built for Toledo parties, and will be finished ready for sea in June. Her dimensions are 320 feet in length, 41 feet beam, 21 feet hold on top of the floor keelsons. She has steel keelsons, three arch cords on the outside and diagonally strapped also in the outside and arch cords on the ceiling. She will have the finest triple expansion engine, built by the Frontier Iron Works, of Detroit, and large boilers. She will have the Williamson Bros. steam steerer and a Providence steam capstan on the quarter deck; also a steam windlass and capstan forward, all from the American Ship windlass company of Providence R. I. All her cabins and parlors will be fitted out with the finest furnishings that can be obtained. Her carrying capacity will be 100,000 bushels of corn. She is designed for the iron ore and grain trade.

Another big one was commenced some weeks ago. She will be 300 feet long, with all the latest improvements, and will be completed by fall. Captain Davidson is building this steamer for himself, and will run her in the grain and ore trade.

BAY CITY, MICH

Saturday afternoon, at 3 30 o'clock the new steamship Clarence J. Filmore was successfully launched from F. W. Wheeler's shipyard. Her owners are Gratwick, Smith & Freyer, of Buffalo. She will be used for the lumber trade. She left here for Buffalo Thursday.

BUFFALO, N. Y.

Special to the Marine Record.

R. K. Winslow of Cleveland, writes that the Trout wheel put on steamer Egyptian is a success and working splendidly.

The Graham & Morton transportation company write that the Trout wheel put on steamer Lora is a success, and has increased her speed, and she makes the run from Benton Harbor to Chicago in about half an hour; better time than with any wheel she ever had on, being an increase of about one mile per hour.

Manager Bullard of the Union steamboat company, received a dispatch from Chicago saying that the steamer Owego arrived here at 2 a. m. western time. She made the run in 55 hours and 18 minutes, beating the record made by the Chemung by 2 hours and 32 minutes and her own previous time by 2 hours and 42 minutes. The time reported, 54 hours, by the Chemung was incorrect. Her time was 57 hours and 50 minutes.

The Buffalo marine fireman's assembly is in a flourishing condition. Wages of their members are placed at ten shillings per day The firemen feel aggrieved that this modest rate is not accepted by the owners instead of the $35 monthly rate, and say that while they sign for the nominal rate their pay is usually made to aggregate ten shillings by overtime being allowed during the trip.

E. L. Parrish, shipchandler, is fitting out the new steamer America, built by the Union Dry Dock Co.

Samuel McCutcheon, engineer supply store, whose advertisement appears in another column of this paper, is doing quite an extensive marine business.

The Queen City Metal Co. have opened a machine shop and brass foundry at 16, 18 and 20 Elk street. They are doing a lively marine business in their special line of work

Messrs. Russell & Watson, successors to Felthousen & Russell, are receiving a large patronage and supplying their excellent signal lamps to firms at every port on the chain of lakes. The firm is an old established and reliable one, and guarantees satisfaction in all cases.

The Union line passenger steamer Starucca, which went ashore on Lake Superior, near White Fish point last fall, has been broken up by the winter seas, and all that is left of a once fine vessel is now scattered along the beach for miles. The Starucca's loss was the worst of last season, and it was hoped that she would hold together until spring, when determined efforts were to be made to lift her off the beach.

After the big schooner Northwest had been on Pilot island for sometime last fall George McCloud, representing Smith, Davis & Co.'s insurance companies, who had the risk, gave it as his opinion that she could never be gotten off. On the strength of this opinion Smith & Davis sold the wreck at private sale for $2,500 to James Reid, of St. Ignace, Mich. No sooner had Reid bought the boat than he sends a wrecking outfit to her release, and she comes off Pilot island as nice as a pin and is now on her way to drydock for repairs. She is said to be in excellent condition, far better than was expected even by Mr. Reid. The Northwest was rated last year at $35,000 and was insured for something like $30,000. The insurance companies paid a total loss and got back the $2,500. Reid paid the $2,500, and, counting in the cost of repairs, got a fine boat at a sixth her value.

The Erie coal trestle will be ready for business to-morrow and vessels will be taken for that dock at once.

Captain C. H. Lane received a bill of damages amounting to $1,300 from the owners of the tug Balize, which, it is claimed, was done her by the propeller Hiawatha in St. Clair river this spring. Of this amount $500 is claimed for loss of time. The difficulty appears to have been lost sight of by the public.

The house of the tug Dimick was considerably smashed on Monday night by a collision with a boom on the schooner A. P. Grover, which the tug was passing as she lay at the salt dock in the Blackwell. Nobody was hurt on the tug but it was a rather close call.

The managers of the Dakota elevator gave notice that they were ready to deliver grain at four o'clock Monday, but will not, it is learned, be ready to receive grain for a day or two.

The propeller Samoa, which was detained here by a leak in her boiler, is reported about ready to go.

A diver is at work in front of the Evans elevator blasting out some rock that obstructs the channel.

MARINE CITY, MICH.

Special to the Marine Record.

Captain Joe P. Cottrell's smiling face appeared at this port on the arrival of his new and beautiful steamship Northern Queen, of the Northern line, Saturday afternoon, the 11th inst. The boys stood on the burning deck without peanuts, looking wistfully to put foot on shore, but Captain Joe orders, "men if you do, come back no more."

The P. J. Ralph is about ready for her maiden trip, but will wait for her consort now in tow of the Cumberland. She will also tow the schooner Delaware, purchased by Captain Fern Pringle during the winter Captain J. C. Pringle may be proud of the Ralph, as she is a handsomely constructed steamer. I feel sorry to know that Captain John has not received his share of praise in the construction of the Ralph, as it is understood that he modeled and drafted her. Bob Pringle handles the irons.

The steamship Siberia, with the Joseph Page in tow, passed up at 3 o'clock Sunday afternoon. Captain P. B., was on deck. Quite a number of her crew hail from here, and there was quite a display of white and colored cotton while passing.

Captain John Kuhn, of the Mat Sicken, arrived here Saturday afternoon in tow he barge Levi Rawson, but had to wait twenty four-hours for her. The Rawson had a thorough rebuild during the winter and will rate good. She is in fine shape, but the same Levi Rawson. Captain Joseph Rose is master.

We wish to say through the columns of the MARINE RECORD of Cleveland, that we have established an intelligence, shipping, law and collection office on Water street, facing Bridge street, at the lower end of Marine City, where we are prepared to furnish all kinds of help from captains down to deck officers. We keep open night and day, and you will find Chicago, Detroit and Cleveland papers that are interested in marine matters.

MCNIFF & SON.

CHICAGO, ILL.

Several coal dealers called on commissioner Purdy last Friday, complaining of the shallowness of the river and the impossibility of getting vessels up to the docks. They were told that five dredges were at work in the river at present scooping out the shallow places, and it was impossible to proceed any faster. City Engineer Northway says the river and lake are lower now than at any time since 1847, and this accounts for the bad condition of the river. Last year, he said, we spent all the money we had for dredging the shallw spots in the river, and the same places seem to be no better for it. This is accounted for by low water, natural fillings in from sewerage solids, and the fact that some of the scows last year dumped their loads as they passed down the river. It was to prevent this latter that private watchmen were put on the scows. The water this year in the river and lake is 7¼ to 9½ inches lower than it was last year, while it is 2 feet lower than in 1887, while there was a decrease between 1886 and 1887. I can not explain the cause, unless it is due to a lack of rain and snow."

Mayor Creiger said that the fact that the lake was below datum was due to the continued wind from the southeast, which drove it across to the northwest. "It is a remarkable thing," he said, "and worthy of record."

Captain Michael Ryan of the barge Planet of Saginaw was stabbed and mortally wounded by his mate, Daniel Barron Tuesday morning. Bad whisky occasioned the fracas as both men were drunk. Barron was caught after a hot chase and locked up.

SHEBOYGAN, WIS.

Special to the Marine Record.

The large steamship building at Rieboldt Wolter & Co's shipyard, will be ready for launching May 25th, in command of Captain John Cochran.

The new tug, Wm. H. Simpson and Starke, will be finished and ready to take their commissions in Milwaukee river towing by May 25th.

Rieboldt, Wolter & Co., have lately closed another contract for building the Milwaukee river fire tug. Length of keel 105 feet, beam, 24 feet 6 inches, depth 11 feet. Iron arched, &c, and only to be used for protection at fires in Milwaukee river.

Captain H. Downer will command and turn the wheel of the tug W. H. Simpson and Nick Smith will pull the throttle. She is a very fine boat.

Captain H. Hurth will command the tug Starke, and his son Fred Hurth will attend to engineering her.

The government should attend to a speedy dredging and harbor superstructure work at this port. It is somewhat slighted by our government official, who must have overlooked this matter very much.

A great many cars of long oak, from Paducah, Ky., are coming in daily at Rieboldt & Wolter's yard.

Coal laden schooner, Truman Ziegel came in port and got aground in the river, but with the assistance of two tugs was landed safe at her coal docks.

It has been said that Mr. G. M. Groh would make a very good man for deputy colletor of customs, for the port of Sheboygan, as he is well versed in marine matters and well liked by marine men.

Captain C. Starke came up from Milwaukee Saturday to see about a hasty completion of his tugs.

City dredge is at work deepening the channel of the river.

There have been three divers in here who have secured a number of anchors and chains from the bottom of the lake off this port, from vessels lost some years ago, and it is claimed by one of these divers that $700 in gold and silver lays in the cabin of the schooner Hattie Taylor, laying at the bottom of the lake 100 feet deep; also $1,000 in an iron safe in the cabin of the steamer Phœnix, burned off here some years back. It has been reported that the steamer Chamberlain, of the Bradley estate, of Cleveland, can be raised without much difficulty. G.

DETROIT, MICH.

The Detroit river tug lines are now running wild and prices have been cut considerably, half rates being paid in some instances.

S B. Grummond's wrecking tug Swain, that has been stationed at Grosse point for the purpose of rendering assistance to vessels aground at that spot, had a field day on Tuesday of last week. In the morning she pulled off the new steamer Topeka after an hour's work; then she received orders to go to Port Huron to assist the steamer Cormorant and consort. On her way up she found the steamer Syracuse fast on the bottom, which she released in a short time. Proceeding on her way, when just opposite St. Clair, found the steamer Tokio also hard on. Assisting this vessel she finally reached her destination before night and arrived at Detroit late Wednesday night, with the Cormorant and consort.

The Kaliyuga and Fontana went aground at Grosse point. A ferryboat went to their assistance. The Colonial was aground in the same place but got off without assistance and passed down.

SUPERIOR CITY, MICH.

A number of Lehigh coal company officials arrived here Tuesday evening. They will take some action regarding the coal heavers' strike, after which they go to Ashland on the same business.

HURON, OHIO.

Greenhalgh & Hendrickson have purchased for $50 the sunken hull of the propeller Handy Boy, which burned to the water's edge at Huron last fall. The tug Worswick with a wrecking outfit was ready last night to go to Huron to raise the hull.

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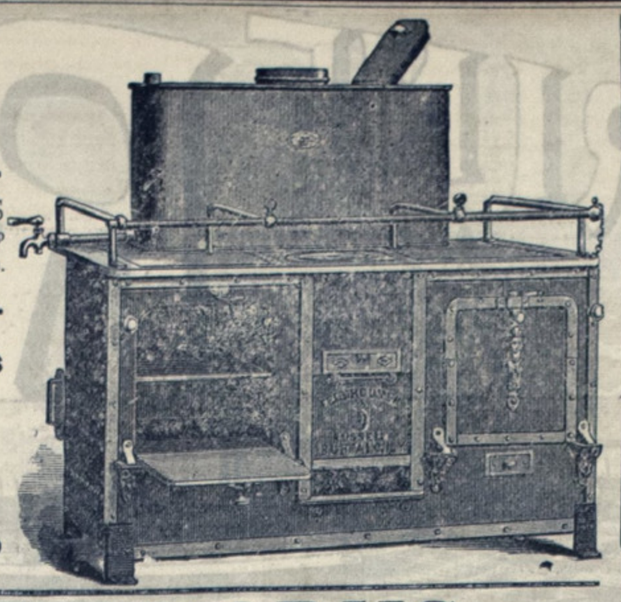

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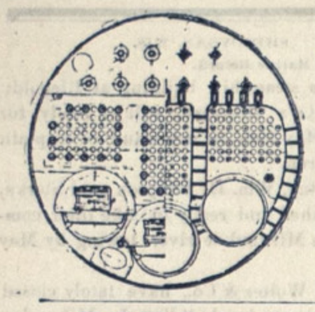

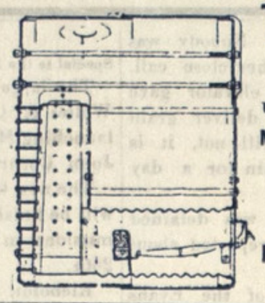

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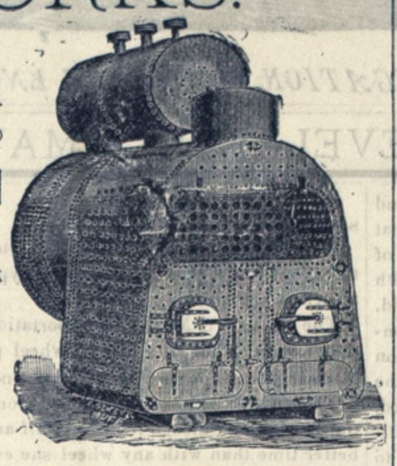

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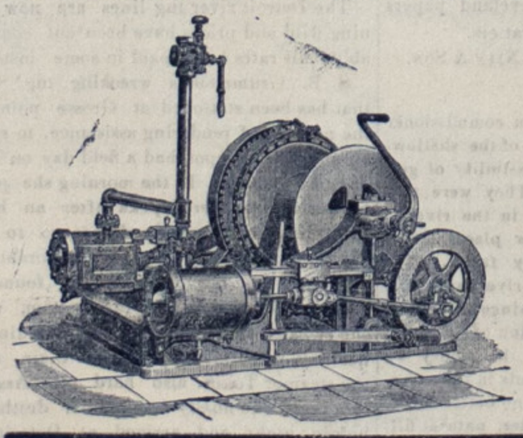

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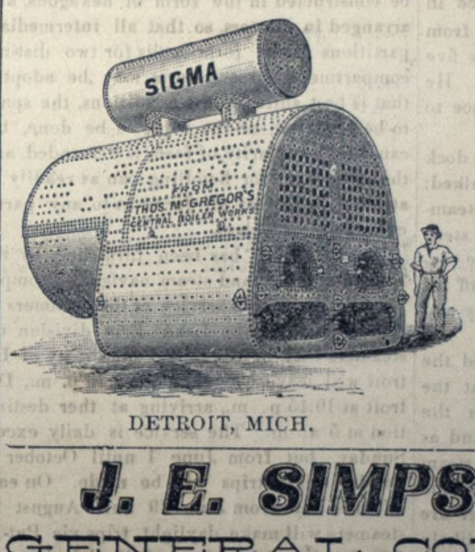

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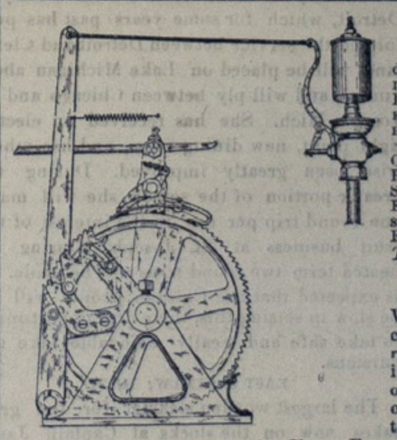

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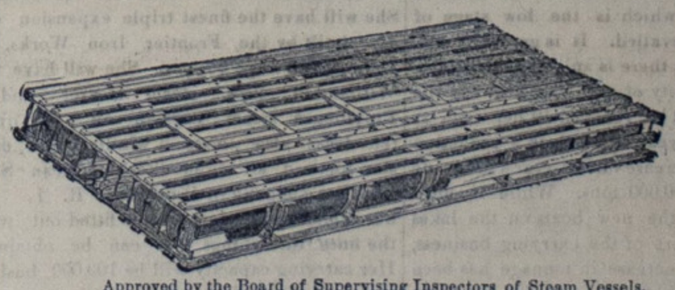

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MARINE RECORD—OFFICAL PAPER.

DETROIT RIVER BRIDGE.

At a meeting of the Board of Managers of the Lake Carriers' Association, held April 26, in the committee rooms of the merchants' exchange, Buffalo, it was voted that the following statement of the views of the association on the question of a winter bridge across the Detroit river, be approved, adopted and presented to the board of army engineers which considered that question May 1st at Detroit.

BUFFALO, N. Y., April 26, 1889.

To the Board of United States Engineers appointed to investigate and report upon the "practicability and necessity of a bridge across the Detroit river."

At a meeting of the Board of Managers of the Lake Carriers' Association, held in Buffalo on the 20th ult., I was directed to prepare a statement of their views upon the question now before you. Previous attempts to obtain permission to bridge the Detroit river have led to exhaustive investigations, as appears by the reports transmitted by the secretary of war to the United States senate ten years ago, in 1879, and to the house of representatives sixteen years ago, in 1873. On both of these occasions the board of army engineers appointed to investigate reported that the only unobjectionable method of crossing the river by trains was through a tunnel, and that a tunnel was practicable both as to cost and as to construction. Elaborate statements were laid before these boards by the conflicting interests, and we insist that unless those who favor a railroad bridge can show that the situation has changed materially, and that the conclusions of these boards are no longer applicable, we ought not to be compelled to restate the arguments then presented. You are to report on the necessity of a bridge. If a tunnel is practicable a bridge is not necessary; for a tunnel would perfectly accommodate the railroad traffic and be no obstruction whatever to navigation. A winter bridge, on the other hand, would benefit the railroad interests during but four months of the year, or less, and its only advantage to the railroads is the undisputed injury that it would cause their rival by its obstruction of the narrow waterway which is already too small for the growing mass of shipping that traverses it in its passage through the great lakes.

* * * * * * *

We wish to approach this question in a spirit of fairness, and we recognize that if a tunnel were impossible it might be necessary for the vessel interests to submit to a winter bridge at the expense of some obstruction to the summer shipping, but we think, not only that the railroad companies are unfairly avoiding the question of a tunnel, but that they magnify unduly their present inconvenience, and at the same time under-estimate the obstruction which the permanent piers of a winter bridge would prove in the river.

The railroads often speak almost as if the Detroit winter ferriage were solely responsible for their increased delays and stoppages in the winter season. We understand, however, that during severe weather railroads in this latitude which have no rivers to cross are delayed in their freight transit nearly as much as the Grand Trunk or Michigan Central.

The duration of the obstruction seems to be also exaggerated. According to the table of the length of time navigation was open each year since 1880, given by Gen. Poe at p. 2269 of his report for 1887, and continued to date in the last report of the Detroit board of trade, the season of navigation for the last eight years has averaged 237 days, or very nearly eight months. But this is a very different thing from saying that there are four months yearly in which ferriage is difficult. The evidence taken in 1873 was exhaustive and we find in the statement in favor of a bridge then made by Franklin Moore, Esq., of Detroit, the following interesting admission: "The river itself does not freeze clear across, but the water freezes in pieces and becomes wedged together, and so is frozen. Consequently breaking up takes but little time. I have often known the channel nearly free, or the ice floating in pieces in the morning when in the evening before it appeared to be frozen solid clear across. There is one particular point about it. This river don't freeze across. It is the ice that comes down from above, and is clogged here and frozen in pieces." In the solid winter weather, when the ice above is firmly frozen there would therefore be no serious obstructions at Detroit, for ice heavy enough to obstruct never forms in the river. Three years out of four the ice in the Detroit river does not offer a serious obstruction to the passage of the transfer boats even now in use. It is the general opinion that there are not more than forty days in a year when the ice is a barrier to the rapid passage of ferry boats. It was so stated in 1873 in a memorial signed by 138 prominent citizens of Detroit, and the powerful ferry boats of today not only make quicker trips, but are much less easily obstructed than those then in use.

It appears also from table No. XIII of the report of the 1873 board of engineers that the average cost of railroad ferriage per ton was occasionally less in winter than in summer when the river was full of vessels.

On the other hand, the impediment to navigation that would be caused by the permanent piers of a winter bridge is greater than it is sometimes represented to be. The bridge proposed has one clear opening of 1,000 feet and four of 200 feet each, leaving the river with a width of 1,800 feet, broken up into five different pieces. The seven permanent piers aggregate a width of 200 feet, and the three sections of permanent bridge make 600 feet more, so that the bridge would cover in summer 800 feet out of a total of 2,600, or nearly one-third of the width of the river.

At Stony Island, where the Canadian Southern railway crosses the river, the bridging, embankment and piers of the railway occupy nearly one-half of the river, leaving however a waterway of 3,360 feet. Just below is the Lime Kiln crossing. At this point navigation is very difficult, and according to the report of the board of army engineers in 1873 (p. 16:) "The current is curved, swifter than at Detroit, its velocity having been increased by the obstructions already placed in the river by the railway company, so that now it is five miles an hour at the railway company's pier at Stony Island, and about two and a half miles an hour in the main channel." That is to say, the board reported unanimously that the obstructing piers doubled the velocity of the current where it passed them, although a clear waterway was left of over 3,000 feet.

Rafts and vessels in tow would be especially liable to accident when passing the openings left by the bridge, and especially with a down current. Vessels do not answer the helm so quickly in a tow as by themselves, and if the head vessel should take the least sheer it would be pretty sure to put all behind her in bad shape and increase the chance of striking the abutments. Again, if a long tow, especially at night or in a breeze, should meet a sailing vessel when very near the bridge (and the river is becoming constantly more crowded,) it might compel the tow to alter its course a point or more so that it would be impossible to get the tow in line again before getting to the bridge.

It does not help the difficulty to remind us that there are natural obstructions in the Detroit river worse than this bridge would be. The waterways connecting the great lakes are not all that could be desired, and the United States government spends large sums annually in improving them. In his last annual report General Poe speaks of the improvements at the Lime Kilns, by which the river gains seven feet in depth, for a width of 400 feet, as "of incalculable benefit to the commerce passing this point." Presumably he would not approve of spending a million dollars to place permanent obstructions in the river, if a tunnel can be built for about the same sum.

We can refer this board with confidence to General Poe's statistics as to the comparative magnitude of the interests which come into conflict at Detroit, as summarized in his reports from 1885 to 1888. It is not necessary to repeat his figures, but they fully bear out his official statement in 1888, that the shipping passing this point aggregates each year "more than 40,000 vessels, with a tonnage of more than 20,000,000, or fully six times the entire commerce crossing the Detroit river, both ways, by rail." If we estimate that the railroads do a full third of their business during the four obstructed winter months, it appears that 20,000,000 tons of freight is asked to yield its interests for the benefit of one eighteenth of that amount, for a winter bridge would not benefit the summer railroad traffic. And when we consider only the forty days during which ice in the river is a material hindrance, the railway traffic that would be benefitted becomes only one-fifty-fourth of the summer traffic that would be annoyed by unnecessary obstructions in the river. It may be that with a bridge the railroad traffic would increase rapidly to larger proportions, but the vessel traffic is increasing also. Even if the bridge were not now objectionable, it would quickly become so, for the Detroit river needs to grow rather than shrink, in order to accommodate the rapidly growing mass of shipping that traverses it. A winter bridge would also become daily more and more inadequate to relieve materially the increasing needs of the railroads. There is every necessity for a permanent solution of the difficulty by the only unobjectionable method.

It is not easy to realize what is meant when we say that the number of vessels passing Detroit annually, is already "over 40,000, with a tonnage of more than 20,000,000 tons." According to the English statesman's year book, for 1889, 'The total shipping of the United Kingdom, sailing and steam, and for both home and foreign trade amounted in 1887 to but 17,723 vessels, with a tonnage of 7,123,754 tons. The above numbers include vessels of the Isle of Man and the Channel Islands, but not those of the British possessions. The total tonnage of vessels belonging to the British Empire in 1887 was 9,135,512 tons. The total tonnage of the merchant marine of the United States in 1887 was 4,105,845 tons, so that the United States and Great Britain together own eleven million tons, or about one half the tonnage that annually passes Detroit. Moreover, the tonnage of American and foreign sailing and steam vessels entered at all the seaports of the United States from foreign countries in 1887 was but 13,531,715 tons. The tonnage cleared for foreign countries during the same peroid was 13,510,535 tons, making together twenty-seven million tons for the year, to and from all the seaports of the United States, or for eight months not so much certainly as passes by Detroit in the same length of time.

As is said repeatedly by General Poe in his official reports, the question "is truly national in character." In recommending improvements in the Detroit river, General Poe says: "The improvement benefits no local interests. On the contrary, it is national in its character; the states of New York, Pennsylvania, Ohio, Illinois, Wisconsin Iowa (northern part) and Minnesota, and even the territories of Dakota and Montana being more directly benefited by it than is the state of Michigan, upon the borders of which it is situated. It is important to remember this, in case local feeling at Detroit is in favor of a bridge. The great mercantile interests of Detroit, however considerable, cannot be compared with the enormous stream of commerce that sweeps by her doors. Much of this commerce passes by Detroit without benefiting the city, and it may be that many of her citizens think of this question chiefly in relation to the inconvenience of river ferriage in their railroad journeys to and from Detroit, or in communicating with the city of Windsor. It is not possible, however, to consider the interests of Detroit alone in such a matter as this, although a tunnel would remedy both the difficulties suggested. It concerns the interests of the whole people of this country to have transportation as cheap as possible. The immense products of the northwest are increasing rapidly from year to year, as the population increases, and even now are transported with difficulty to the markets of the east, with all the facilities that can be afforded. It is of vital importance to the development of this northwest, which is still in its infancy, and to the country at large, that every practicable outlet for freight be enlarged, and that its main highway should not be narrowed by planting in it unnecessary obstructions. The obstructions called for would injure the producers of the northwest and the consumers of the country for the benefit of a few wealthy railroad corporations, too few in number and too wealthy for any free play of competition between them. On the other hand, no extensive combination to fix rates is possible among the widely scattered vessel-owners, and the Lake Carriers' Association, which represents their interests, distinctly declares that it "will not attempt to control or regulate lake freights."

It is also proper to call your attention to the fact that the incorporators of the proposed winter bridge are all individuals, and do not represent any great interests such as would be injured by their scheme. They are citizens of Detroit, engaged in a private speculative enterprise for their own gain, and they should not be allowed to snatch toll from the passing commerce for their own aggrandizement unless they can make out a very clear case of necessity for the public good.

The railroad interests have twice tried unsuccessfully to show that a winter bridge was necessary, and we again insist that the present hearing should be considered final. It is a grave thing to suggest that the railroads are desirous of injuring a rival interest, but they have never yet shown any disposition to consider seriously the one solution of the present problem which would give permanent relief, and which, in the words of the board of 1879, "is deemed practicable, and if properly constructed will accommodate the railroad traffic and be no obstruction whatever to navigation." Very respectfully,

FREDERIC ALMY,
Secretary Lake Carriers' Association.

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MARINE RECORD—OFFICIAL PAPER.

RAFT TOWING.

At a meeting of the lake carriers' association held in Buffalo, N. Y., on May 10, the managers unanimously agreed to present a petition to Gen. O. M. Poe, asking for the stoppage of raft towing over the narrow waters at the Limekiln crossing, Detroit river, there being plenty of water outside the crossing for them. We consider that this action ought to have been taken long ago, as the large, unwieldly rafts of logs have jeopardized valuable tonnage during the several seasons past. There ought to be some official restriction placed at the Limekiln crossing, so that due cognizance might be taken of any infringement of the rules of the road, for not only does the passage of rafts act detrimental to the best interests of navigation, but the bearish disposition of the officers in charge sometimes crowds passing vessels unnecessarily, and the honor of the fraternity prevents complaints being made through the medium of the press, while private remonstrances are unavailing. Hence the necessity for an official recognition of the discourteous, and illegal methods practiced by men who are often more thoughtless than culpable. As a preliminary step to the better observance of the necessities of commerce, we heartily commend the resolutions adopted by the managers of the lake carriers' association, and trust that Gen. O. M. Poe will issue instructions at an early date, prohibiting the movement of rafts through these narrow waters, which are already too limited to accommodate the daily increasing volume of trade, carried in properly licensed bottoms. Even if there was no water outside the channel, a system of signalling could be brought into use, and the rafts taken down at a time when the crossing was practically clear of vessels; but to take an unwieldly tow of logs through one of the main arteries of commerce, irrespective of the consequences which might result; and which in many cases have been partially avoided only by the circumspection and skill of those in charge, is according to our light, extremely reprehensible.

Not only does the question of raft towing agitate the minds of those interested in lake commerce, but there are indications that a good deal of trouble is ahead in connection with rafting logs. On the Mississippi river, navigation has already been seriously obstructed, and trains on the Chicago, Milwaukee & St. Paul route have been delayed several hours at a time on account of a pontoon bridge being kept open to allow the passage of logs, and the entire temporary demoralization of the train service was the result. It is intended to lay the matter before the proper department at Washington, so far at least as it relates to the delay of mails. What other steps will be taken can not now be learned, but the remonstrance ought to have a beneficial effect on the bill recently placed in the hands of congressman Farquhar, New York, prohibiting the towage of rafts on the navigable waterways of the United States, and certainly restrictions are becoming more of a necessity each year.

MUTUAL INSURANCE.

In a recent issue we called attention to the proportion between the number of vessels in the Chicago vessel owners' association and the number of casualties affecting the same during last season, which showed an approximate cost of 1 per cent. for insurance had the mutual insurance system been in operation among those owners in 1888. To this it has been objected that 1888 was an exceptionally favorable season, but it must be remembered that we went so far as to allow for three times the number of losses for ordinary years, which provision should satisfy any reasonable critic.

Other and confirmatory figures are not, however, wanting, and we now submit the official Chicago board of trade statistics, dealing with the same subject for the year 1887. It will there be seen that the MARINE RECORD'S estimate of an average cost of 3 per cent. is upheld. In 1887, we are told, one propeller was reported lost out of a total of fifty-one being at the rate of slightly under 2 per cent. Out of 202 schooners the following casualties were sustained: L. V. Valkenburgh, sunk; Gesine, foundered; City of Green Bay, stranded; Maine, stranded; Blazing Star, stranded. Assuming that all of these were totally lost the result shows something like a cost of 2½ per cent.

In our estimate, based on the result of 1888, provision was made for averages. For 1887 we have, unfortunately, not been supplied with the necessary figures, but allowing even one-half, or 50 per cent., extra as a more than liberal allowance to supply the cost of averages, it will be seen that our estimated mean of 3 per cent. was substantially correct. Prophesying is not part of our profession and we are not disposed to say that 3 per cent. will always cover the average cost of insurance, we therefore confine ourselves to deductions from ascertained facts and accept no further responsibility. There seems, however, little to justify the fears of those owners who pretend to think that mutual insurance might cost them 40 or 50 per cent. If there is, they must be in possession of information which is denied to this journal, or they must fear incapable, if not fraudulent management, a matter they have entirely in their own hands.

CANADIAN COMMERCE.

It is time that our transportation lines, and firms turned their attention to the increasing encroachment of their rights and traffic by the Canadian Pacific, and other railroad corporations. There is no pertinent or commercial reason in allowing our cousins across the border to walk off with a considerable quantity of what may justly be termed, purely United States business, simply because laws have been framed to protect the shippers. Yet the facts are becoming more prominent daily, that the above is the case, and our various freight lines are suffering from a retroaction of the inter-state commerce laws, which though an excellent feature in the rulings and discipline of commerce, is not without a certain tinge of evil in its workings. Especially is this felt in our relations with the fast becoming giant monopoly, "the Canadian Pacific railroad" who have discovered that the inter-state commerce law gives them as a foreign corporation, inestimable advantages over the lines owned, and controlled by citizens of the United States. While it is hardly within our province to speak of railroads, or their management, we are vitally interested in all that appertains to the marine commerce, and in this connection we learn that the Canadian Pacific is preparing to make a strong bid for the export trade from Chicago by establishing a line of propellers to carry freight and passengers from that city to the nearest point in Canada, probably to Sault ste. Marie, where cargoes may be transhipped to the east, over their own lines to a seaport. The plan is feasible, inasmuch as the interstate commerce law does not attempt to control water lines connecting with foreign roads; therefore, the Canadian Pacific could easily reach Chicago by making rates sufficiently low to get the bulk of the export traffic; and it is stated on the authority of the traffic managers that the new route from Chicago to Montreal would certainly be opened for business about June 1st. In that case the Canadian Pacific may possibly obtain a footing in the carrying trade of the lakes similar to the established lines which are now running out of Buffalo, N. Y. While no obstruction should be placed in the way of lawful commerce, competitors ought not to be allowed to trade on the laws enacted for the welfare of the citizens of the United States, without their being amenable to such laws, and the sooner a pressure is brought to bear compelling the Canadian Pacific to observe the provisions of the inter-state commerce bill, the better for the traffic of other lines.

COLLECTOR ERHARDT Saturday afternoon decided a dispute of long standing between New York customs authorities and merchants. The decision involves nearly $1,500,000 annually, and is the result of several investigations. Invoices of manufactured worsted goods have been found by the appraisers to contain large quantities of wool, and have therefore been appraised under section 362 of the tariff law, which calls for a duty of thirty-five cents per pound and 35 per cent ad valorem on all woolen goods under the value of 80 cents per pound. The importers claimed that the goods contained only "combed" wool and should come in under the section classifying "blankets, wool hats, and all goods made in knitting frames," and calling for a duty of from 10 to 8 cents per pound on goods worth 30 to 80 cents. Two invoices brought by the City of Paris and Umbria form the basis of the decision, which is adverse to the importers. Collector Erhardt notified the importers that they might appeal to the secretary of the treasury.

THE courage, humanity, simplicity, and modesty of Captain Murrell, of the Missouri, who rescued 600 passengers of the Danmark, completely won the hearts of the people of Philadelphia and Baltimore. He was dined and wined and feted until he was threatened with dyspepsia. Flowers were showered upon him, and he was made a welcome guest everywhere. He bore his honors with the meekness of a true sailor, and no doubt wished many a time that he was well at sea again. His admirers not content with entertaining him in every conceivable way, made up a purse of money and gave it to him, and he accepted it—but only to hand it over to the survivors of the Danmark, who had lost their all.

MAJOR JOHN ADAMS, chief of engineers of the war department, says that the report of the commissioners, whose hearing at Detroit with reference to the question of bridging the Detroit river, has just been completed but will probably not be presented for several months. The papers have not all been filed on either side, and the report cannot be made to the senate committee on commerce until congress convenes. The engineers will have no occasion to rush matters. The report will be first made to the secretary of war and by him transmitted to the senate committee.

CANADIAN LICENSES.

SAULT STE MARIE, May 10.

To the Editor of the Marine Record.

Sir:—In your issue of May 2nd I read Sula's letter in regard to Canadians sailing on American boats. I know quite a few of them that are holding possitions on American boats as mates and second mates that have never lived here any longer than from the opening of navigation until the closing of the same, and there are a good many of them that have got citizens papers that also live in Canada. I have been talking with some of them about it and they claim that if they sail on our boats that it is the same as if they were stopping ashore for the same length of time. They come here in the spring and go back to Canada in the fall and stay there all winter, some of them holding property there. They always manage to get some one to swear they have known them to be citizens of the states for the past five years. If sailing on our boats that length of time makes them citizens then I wish you would publish the law in regard to it, for I am thinking that our laws are dealt with regarding these Canadians very loosely and they should be looked after more closely than they are. I could name quite a number of them, but, as Sula says, it is no funeral of mine. I would like to hear from others on this subject. YOURS, ST. LAWRENCE.

INTERNATIONAL MARINE CONFERENCE.

BUFFALO, May 11.

To the Editor of the Marine Record.

I send herewith minutes of the last Lake Carriers' Association board meeting:

A meeting of the board of managers of the Lake Carriers' Association was held in Buffalo, May 10, 1889, with President Caldwell in the chair. It was decided to make inquiries as to whether the international marine conference, to meet at Washington, October 16, 1889, would consider questsons of lake navigation. Attention was called to the fact that the latest government chart of the Detroit river was made in 1873, and was no longer reliable, and it was decided to endeavor to procure a new government survey. It was also moved and carried that Gen. Poe be requested to issue an order prohibiting the passage of rafts through the narrow cut at the Limekiln crossing in the Detroit river. Other matters of minor importance were considered.

FREDERICK ALMY, Secretary.

Frank Perry, of the Sault has the most complete wrecking outfit on the lakes, furnishes divers, coal boats day or night, tows logs, furnishes booms.

FORE AND AFT.

The sidewheel steamer Alaska, recently burned at Detroit, will not be rebuilt.

One half interest in the schooner Cascade was sold by Richard Stone to M. L. Edwards for $1.000.

Duluth advices are that the coal handlers at West Superior are still out with no signs of a settlement.

The damage done to the schooner Schuylkill, recently ashore on Starve Island will amount to $1.500.

Mr. S. M. Dalzell is again here to represent W. L. Scott & Co in the lake trade, Mr. Dalzell's office has been opened.

A San Francisco man has offered a purse of $250 to the single sculler who will break the world's record for three miles.

Eight hundred and seventy-seven miles in 55 hours and 18 minutes! This is the record of the Owego's flight from Buffalo to Chicago.

Breck & Booth of Milwaukee are commissioned to ship 15,000 tons of railroad iron to Windsor for the Canadian Pacific railway company.

In 1888 391 vessels arrived at Superior, carrying a total freight of 1,820,000 tons, while in 1880 only 12 vessels arrived, with a total of 13,218 tons.

While off Beaver island the shaft bearing of the steamer John C. Pringle gave way, causing the wheel to drop down and break one of the oucke s.

A subsequent test of the United States government launch, the Tangent, developed a speed of over fourteen miles an hour, and she will be accepted.

It is rumored that a company of American and Canadian capitalists, headed by Andrew Carnegie, is making arrangements to construct a cable from Nova Scota to Scotland.

Lieut. Abram F. Rockefeller, U. S. N., died at his home in Hudson, N. Y., after a brief illness. He was 46 years of age, and has made a brilliant record in the naval service.

The propeller Nahant on her former trip up picked up a sail boat off Long Point on April 27th. Anybody knowing whose property it is will confer a favor by reporting to Hand & Johnson's tug office, Buffalo.

For some reason there is an unusual activity among Lake Ontario coal carriers just now. Nine cargoes passed through the Welland in three days last week, bound for Chicago and four vessels have come down from Lake Ontario after coal.

Managers of the Lake Carriers' Association instructed the secretary to confer with General Poe as to how to get a new survey of the Detroit river, which is badly needed; also to ask him to stop the passage of rafts over the Limekiln crossing.

The United States engineers launch Tangent has not yet proved satisfactory to the government. She has made a speed over a six-mile course of eight and three-quarter miles per hour, and during the test ran up as high as ten miles or over; her guaranteed speed is eleven miles.

While the schooner W. L. Collins was making the harbor of South Manitou Tuesday a sailor named Theodore Gabrielson, was caught in the jib topsail sheet and jerked overboard and drowned. Gabrielson was one of the passengers of the ill fated Danmark and leavs a wife in Norway.

The steamer City of Paris made the run from Queenstown to Sandy Hook in five days, twenty-three hours and seven minutes. The Alaska first dropped the record below seven days, then followed the Oregon, the America, the Umbria, and the Etruria, each lessening the time, until the City of Paris beats the record.

When Captain Paul's dredge was at work this morning, a diver came across a large anchor. The captain is removing the sunken pier which lies about 100 feet beyond the Grand Trunk wharf and has for years been a bugbear for mariners entering the port. When Captain Paul is through with it there will be 16 feet of water over its site.

"If I gave you a pound of metal and ordered you to make the most out of it, what kind of metal would you select?" asked a well known jeweler. "Gold, of course," was the prompt reply. "I'd prefer a pound of steele," said the jeweler, "and I'd have it made into hair springs for watches. A pound of such springs would sell for an even $140,000." It is said that the jeweler was mistaken, insomuch as if he would work up the gold into jewelery it would return him $280,000.

A novel sight was witnessed Monday at the dock of the Canadian fish steamers at Sandusky. The steamer Louise came in from Pelee with a large cargo of fish, among which were five tons of black bass ranging from one to six pounds each in weight—the largest and finest lot of these fish that has been brought here at one time within the past ten years. The novel sight attracted scores of pound net fishermen and anglers to the dock.

A new steamer named Sachem was launched from Robinson's yard at Grand Haven recently. She is 180 feet over all, 165 feet keel, 33 feet beam and 12½ feet depth of hold, with a capacity of 650,000 feet of lumber. She will go into commision in about ten days. A new steamer, built for the Williams transportation company, of South Haven, was launched at that place Saturday. She will cost, when completed, $18,000, and will be used to transport Van Buren county fruit to Chicago.

[CONTINUED FROM PAGE 1.]

PORT HURON, MICH.

Special to the Marine Record.

The schooner Mary Hattie went ashore one mile above Fort Gratiot light on the Canada side Saturday noon in a fog. She was released by the tug Kittie Haight after lightering her deck load. She is leaking badly and will be placed in Dunford & Alverson's drydock for repairs.

Lynn, the marine reporter, has purchased four well trained carrier pigeons which he will place on his tugs to convey messages from his tugs to his office.

The tug Winslow, arrived here with the schooner Geo. C. Finney, which was ashore at Elm creek just below Sand Beach in a leaky condition. The Finney will go into the Wolverine drydock for repairs.

The steambarge Raleigh broke her air pump on Lake St. Clair and stopped here for repairs.

The steambarge Mary Groh is in Dunford & Alversons drydock for calking.

The Ames, Conger and City of Concord are at the Wolverine drydock for repairs.

The steamer Fred Mercur ran aground on the Middle ground, Tuesday, abreast of Sanborn's elevator. She was released by the tug Hand of Lynn's line.

The tug Brockway's boiler gave away while the inspectors were testing her Monday.

The steamer Cole will commence running on the new route about the 20th.

The owners of the steamer J. C. Clark will not fit her out this season.

The Port Huron Wrecking Co's. pontoon was launched at Marysville last week.

Henry Howard of this city has purchased two thirds interest in the tug Brady from Captain Currie on private terms. ISIS.

DULUTH, MINN.

While Charles Le Clair was lifting his nets about nine miles northeast of this place, in twenty-eight fathoms of water, they got fastened to something on the bottom, and he was compelled to tear them The nets parted close to the bottom, and when raised an iron bucket was found entangled in them. The bucket was marked "Vernon." It is thought that the hull of the ill-fated steamer Vernon lies on the bottom at that place. Mr. Le Clair is certain that he could find the place again very easily. It will be remembered that the Vernon was in the north shore trade three or four years ago, as the new steamer of the Booth company. She was very unfortunate here, and was still more so on Lake Michigan, where she was wrecked a year ago.

Next Wednesday work begins by Williams, Upham & Co., on their government dredging contract in the lower bay. A total of $25,000 is to be spent on the work, and 166,666 cubic yards of earth are to be moved. Most of the work will be in making a channel along the east side of Rice's Point, and part in extending harbor area. But little work will be done this year in repairing canal piers. Major Quinn hopes in a short time that masonry piers will be ordered and the present wooden cribs taken out, he does not therefore want to spend money on temporary work. Already Williams, Upham & Co., have two dredge boats at work on their contract for the Grassy Point channel above Rice's Point. On this work $83,000 will be spent and 232,258 yards will be taken out. Captain Barker has his dredges at work on the government dredging in Superior harbor, and cutting out the middle ground below Connor's Point.—*Herald.*

Vessel men here were greatly interested in the test of a new fuel called petrole made Tuesday on the steamer Barker. It is a compressed coal dust and sawdust. The following is the engineer's certificate of the trial: "The run of eighteen miles was made on the lake, quite a stiff breeze blowing at the time, with the following results: An engine 16½x18 and boiler of about 60 horse power. We used 300 pounds of petrole fuel in one hour and thirty minutes, giving from fifty to seventy-five pounds of steam. We ordinarily use 500 pounds of soft coal per hour. While this showing is a great saving of fuel we could have obtained better results from your fuel with a slight alteration of the firebox. We find it gave a minimum amount of smoke, and there was a great saving in the handling of the fuel, with no ashes.

The schooner George has finally been released from Michigan island, where she went ashore in a snowstorm three weeks ago with with the propeller Australasia. The George is reported to be on her way down, but nothing is said of the extent of her injuries.

KINGSTON, ONT.

The steamer Ohio, Captain M. Maddon, Sandusky, with 1,249 tons of soft coal for the Dominion coal and coke company, arrived. She had an unique experience in getting in to the company's dock. The Ohio was drawing 14 feet of water and as there is only 12 feet 6 inches at the dock it can readily be imagined that she stuck when quietly attempting to reach the dock. The captain came ashore to reconnoitre and was told by Mr. Walsh that the ground is clay, without a rock, and he was also given an assurance that he would be discharged if he stuck before he reached the dock. Then he went to the boat, backed her out a considerable distance and made a run for it. He got to the dock and the ship lies comfortably on the clay, about 18 inches lighter draft than when in deep water.

THE SUBSIDY SYSTEM.

A free trade newspaper writes upon "The utter failure of marine subsidies." There has been neither utter nor partial failure in any fair and extensive trial of the system of marine subsidies. It is a system which has had the fullest and most successful trial in a a free trade country, and the most limited—and therefore least successful—trial in a protective country; but as it happens that the protectionists of America recently have declared themselves in favor of subsidies our free trade neighbor thinks it to be the proper caper to assail them. But it is very unfortunate in its line of attack.

In so far as there is any line of argument or coherence of thought or straight sequence of deduction in our contemporary's article on "The utter failure of marine subsidies," it is in this wise:

1. France is a protective country.
2. France adopted the subsidy system.
3. The increase of the number and tonnage of vessels in the French merchant marine is less than that of the English.
4. Therefore the subsidy system is an utter failure.

No such deduction can be drawn from such premises, even if the premises be grounded in truth. But they are not grounded in truth. For (1) France is not a protective country. Hardly a tenth of its revenue is collected from customs or tariff duties, the relation of such duties to the whole revenue being 347,342,600 to 3,755—654,682 francs. And (2) the inference from our cotemporary's statement is that France has tried the subsidy system as long and as lavishly as England, and that the merchant navies of the two countries were on an equal footing at the beginning of the experiment; not one of which assumptions is true. England has given subsidies or bounties, or the equivalents there f in taxes and dues upon goods imported or exported in foreign keels, for as long a term of centuries as France has indulged for years. England has given larger bounties and subsidies than France. England's naval supremacy is of ancient growth. France's acquirement of a respectable naval position dates from her bounty and subsidy system, and has been proportionate to her expenditure in bounties and subsidies. The French do not consider the system to be either an "utter" or a partial failure. It has been proved a success. And (3) the figures quoted from Lloyd's register by our contempory are violently wrenched from their original and true application. They do not show the relative, but only the absolute difference between the increase of English and French shipping. Many Englishmen affect the belief that the percentage of increase of late years in English shipping is not satisfactory, and attribute its comparative decadence to a recent economy in bounties and subsidies.

But the fourth of our contemporary's assumptions is the most violently absurd and unfair. "Therefore, the subsidy system is a failure." Why? Because subsidies in France have not resulted in such an increase to the French mercantile marine as has been achieved by England. The untruthful impression which our contemporary appears to strive after is that England did not subsidize while France did, and that, despite of this lack of subsidies, the English gain was the greater. The truth is that England yearly spends more in ocean mail subsidies by $500,000 than she receives in return on the postage of letters carried by the subsidized steamers, and when an ultra economist in parliament moved for a reduction of the subsidy appropriation the postmaster general—a thorough-going free trader—replied that the object of the subsidies was "not barely to recompense the owners of vessels, but to encourage seamanship and shipbuilding." England does not regard the subsidy system as either an "utter" or a partial failure. The English subsidies to steamships carrying mails to American ports amount to $912,500 a year, which is a considerably larger sum than France expended. But upon her Asiatic trade, which requires a greater measure of protection than her American shipping, England expends $1,721,150 in yearly subsidies. The naval supremacy of England rests upon centuries of direct or indirect application of the subsidy system.—*Inter Ocean.*

This office is in receipt of a circular letter from the First warehouse and forwarding company, West Superior, Wis., calling the attention of shippers to the facilities that company have for storing forwarding, and handling merchandise for distribution over the northwest. Besides being connected with the principal railroads, the company will issue negotiable warehouse receipts, and keep an open policy on the contents of their warehouses, insuring all merchandise entrusted to their care at an exceptionally low rate. The six directors of the firm are well known business men, and we can see no reason why their enterprise should not meet with abundant success; more especially as this particular industry was much needed at the head of Lake Superior. As a method for facilitating the business of shippers, we wish the First warehouse and forwarding company a long era of financial prosperity.

NEW TONNAGE.

List of merchant vessels constructed on the chain of lakes to which official numbers were assigned by the bureau of navigation treasury department Washington D. C. during the week ending May 4 to 11. Steam vessels, Florida, Buffalo, N. Y., official number 120,753, gross tonnage, 2103.06, net 1834.65. Lily, Detroit, Mich., official number 140,992, gross tonnage, 104 32, net 79.19. Pasadena, Cleveland, O., official number 150,465, gross tonnage, 1760 91, net 1468.22. Pandora, Ogdensburg N. Y., official number 150,466, gross tonnage, 13.37, net 6.69. Rinby, Grand Haven, Mich., official number 110.818, gross tonnage, 17. Silver Spray, Buffalo, N. Y., official number, 116,262, gross tonnage, 111.08, net 85.28. Volunteer, Grand Haven Mich., official number, 161,605, gross tonnage, 20.72. Walter H. Stone, Sandusky, O., official number 81,214, gross tonnage, 35.46, net 17.73. Annie, Cleveland, O., official number 106,633, gross tonnage, 78.97, net 48.50. City of Racine, Milwaukee, Wis., official number 126,551, gross tonnage, 1041.02, net 801.39. Francis Hinton, Milwaukee, Wis., official number, 120,754, gross tonnage, 417.34, net 331.07. Fishing Queen, Cleveland, O., official number 120,755, gross tonnage, 15.81, net 7.91. Geyser, Port Huron, Mich., official number 86,036, net tonnage, 14.58. J. C. Ford, Grand Haven, Mich., official number 76,807, gross tonnage, 59.91, net 44.33. Sail vessels, B. L. Pennington, Cleveland, O., official number 3,431, gross tonnage, 1142 21, net 1085.10. Clarance J. Fillmore, Buffalo, N. Y., official number 126,550, gross tonnage, 410.18, net 389.68. Go Look, Port Huron, Mich., official number 86.035, net tonnage, 17.66. The total number of steam vessels are 14, among which are to be found vessels equal to the best tonnage ever put afloat by this country or any other. Their total tonnage amounts to 5793.55 which would give a mean tonnage for each vessel of 413. There are only three sailing vessels with an aggregate tonnage of 1570.05, the mean tonnage taken from this total would give each vessel an average of 524 tons.

LOGS AND LUMBER.

The Canadian government has at last defined its position in the matter of an export duty on logs. The Canadian government, by an order in council based upon an act previously obtained from parliament, has increased the export duty on logs from $2 to $3 per 1,000 feet. By this action the dominion government has evidently sought to accomplish two purposes. One is to please the Canadian lumbermen by relieving them of the onerous competition of American lumbermen. The second is to irritate or bait the Yankee. The latter policy seems to have been adopted by the dominion government now in power on different occasions, and is apparently very popular among the tories in Canada. The lumbermen of the province of Ontario particularly feel the competition of American lumbermen. The practice in Canada is for the provincial government, which controls the crown domain, to put up what are called "limits" at auction. These limits are privileges for cutting timber. The lumbermen from Michigan, Ohio, New York, Wisconsin, and others of the western lumber states go to Canada and enter into competition in this bidding with the Canadians. The result is often that American lumbermen are the highest bidders and secure the right to cut the timber. The new export duty on logs, however, will effectually prevent this, as American lumbermen can not enter into competition with the Canadians with any such burden upon them as an export duty of $2 or $3 per 1,000 feet. One of the indirect intended effects of this tax was to induce Americans to establish saw mills in the dominion. The theory was that this would establish industries in Canada, even if some of the Canadian manufacturers of lumber do not wholly approve of it. It is cheaper, or it is assumed by the dominion government evidently, that it would be cheaper for the Americans to establish saw mills in Canada, and to pay the duty of $2 on boards on admission into the United States than to purchase the right to cut timber on the crown lands and to pay the Canadian export duty of $3 per 1,000 feet on logs. The effect has not been what the dominion government expected, for very few Americans have established lumber mills in Canada, and the consequence of this is that Americans are practically excluded altogether from the lumber business in Canana. The Canadian lumbermen have, therefore, now very little to fear from the bids of their American competitors, but Sir John Macdonald has accomplished his purpose of baiting the Yankee. The Ontario lumbermen are beginning to fear that they have overshot themselves, and anticipate that congress will retaliate by increasing the $2 import duty on lumber into the United States to $3, and in this manner equalize the Canadian export duty on logs. Such a movement on the part of the United States would, of course, be a very serious injury to the Canadian lumbermen, and would undoubtedly force the dominion government speedily to repeal the export tax.

Notice is given by the lighthouse board that on or about May 26, 1889, the structure from which the pier headlight at Fairport light station, Lake Erie, O., is shown, will be moved out at within twenty five feet of the end of the east pier.

NEW STEAMBOATS.

During the past week much interest has been centered in new boats leaving and arriving at this port. The new steamer Pasadena, built by the Shipowners' drydock company for Mr. M. A. Bradley and others, got out on her first voyage Saturday night. She took a cargo og 1,770 tons of coal, and left for Two Harbors. She took as a tow the schooner Ahair Cobb, of the Bradley fleet, also bound for the upper lakes.

The new steel steamer North Star, the last of the six boats built by the Globe iron works company for the Northern Line, got away Saturday. The North Star, if possible, is an improvement in finish on the other boats of the Star line. By the way the emblem of the line, a star combining the colors red, white and blue, at the mast head, is one of the daintiest we have seen on any of the line boats, and must compliment Captain Murch on his good taste.

The steel steamer Frontenac, the first of two steamships under construction by the Cleveland shipbuilding company for the Cleveland iron mining company, got out of port for the first time on Saturday night. She took a small cargo of fifty tons of merchandise, and is bound for Marquette, where she will find her first load of ore. In regard to her carrying ore, a gentleman in passing her at the pier on Saturday night, said she was all to fine a boat to be put into such a carrying trade. She was, in his opinion, of such model and finish as would fit her for carrying package freight.

Similar complimentary remarks were made in regard to the new steamship Neshoto, built by Thomas Quayle's Sons for Mr. Robert R. Rhodes. The Neshoto, painted in the fashionable color (black) of the last year or two, is greatly admired as she lays at the dock at near the foot of St. Clair street. She will get away on her first voyage shortly after making her trial trip.

Added to these interests in the first movements of Cleveland built boats is the City of Detroit, of the Detroit and Cleveland steam navigation company, built by the Detroit dry dock company, which makes her first appearance here Thursday about three p. m. A party of invited friends will leave here on Wednesday night, and the first trip on the new boat from Detroit to Cleveland will be made on Thursday. This announcement will possibly bring large numbers to the piers to see the new boat come in. We do not hesitate to say that the new City of Detroit is the finest fitted and furnished passenger steamer on fresh water, and will compare favorably with the new sound steamers.

The steamer City of Mackinac, which for a few weeks has been running on the line in connection with the City of Cleveland, goes this week on to her regular route between Detroit and Mackinac.

AN OIL-TANK STEAMER.

Baltimore Sun says: The arrival of the German steamer Wilkommen created curiosity in the harbor yesterday, as she is the first oil-tank steamer ever seen in Baltimore. She is a barkentine-rigged vessel, built of steel, and is 326 feet long by 41 feet beam, with 32 feet depth of hold. Her capacity is 28,000 barrels of oil in bulk. She is peculiarly constructed. Her engines and boilers are abaft of the mainmast, and just forward of them are two bulkheads running from the deck to the bottom the space between which is filled with water, to prevent the slightest heat being communicated to the oil. Forward of this begin the seven tanks, divided by eight thwartship bulkheads and one longitudinal, and forward of these are two bulkheads, in which water is carried. A space about eight feet high extends from the top of the tanks to the flush deck, which is intended for the expansion of the oil, which occurs at different periods of the voyage.

The engines are of the triple-expansion type, and beneath them and the boilers are water tanks which contain the condensed water used for steaming. The Wilkommen is one of six tank steamers owned by Mr. W. A. Reidemann, of Bremen, and she is the largest afloat. She is consigned to the Baltimore united oil company, which will load her with 1,270,000 gallons, or 25,400 barrels, of refined oil, all of which is purchased on account of the vessel's owner. Other steam tank vessels are expected to follow the Wilkommen.

The oil for the Wilkommen is pumped through the pipe line to Baltimore from the Pennsylvania oil fields in a crude state and refined at the Baltimore united oil company's work at Canton. From the refineries to the company's wharf, where the Wilkommen will load, the refined article is pumped 4,200 feet through five-inch and four-inch mains. Along the pier a six-inch main extends, from which the oil will flow into the ship's tank through twelve two-inch hose connections. Captain Schaeffer's officers on the Wilkommen are, first mate, L. B. Wichhausen, and second mate, E. H. Sandstedt. The officers and crew number thirty-six men.

Messrs. Napier, Shanks and Bell, the Clyde shipbuilders, have launched the Modjeska, a steel twin screw steamer specially designed and built to the order of the Hamilton steamboat company, Hamilton, Ont., for passenger service on the Canadian lakes. Her dimensions are: Length over all, 185 feet; breadth at main deck, 30 feet; depth moulded, 13 feet; gross tonnage, about 500 tons The general arrangements of the vessel are of the American type, embracing main and promenade decks the whole length of vessel, and a wood awning above extending from foremast to stern. The vessel is handsomely fitted up throughout and will have a high rate of speed so as to make two runs per day between Hamilton and Toronto.

MOTIVE POWER FOR SHIPS' BOATS.

Allusion has been made to electricity as a motive power for ships' boats as being likely to become useful and available. Recent reports of electrically-propelled launches on the Thames show that where stations are placed at proper intervals for supplying stored electricity to the boats, they can run with safety, speed, and ease. When this wonderful invention, but yet in its infancy, attains a little more maturity, it seems to afford a prospect of giving a ready means of propulsion that would be available for ships' boats of almost any size, and it is unlikely that the day is not far distant when a ready application of such a means of motive power will be found one of the greatest helps to the efficiency of ships' boats. Meantime, there is only one science which, under existing circumstances, will be found of service in the matter of fitness of ships' boats for use, and that science is called "practice." A familiarity with the lowering and sailing—after she has a rig, other than the dipping lug given her—of a ship's boat, is the readiest means, until some other is discovered of making her a friend in need, and one that can be relied upon when all else appears likely to fail. —*London Nautical Magazine.*

A WIRE ROPE PRESERVATIVE.

A new use of graphite consists in its application to wire rope. Wire rope is expensive and is rapidly coming into a much larger consumption. It is largely used in distant fields and mines, where breakages cost double and treble the usual cost of repair, so that a wire rope preservative is literally a boon.

This is found in graphite. The graphite must be pure as only the flake is useful. The best is the Ticonderoga graphite flake, mined and prepared for the market by the Jos. Dixon Crucible Co., of Jersey City, N. J.

This graphite is then prepared by the same firm in a grease which makes the application of the graphite, to the wire rope, easy.

Have a tinsmith make a tin tube, trumpet shaped, the small end just large enough to fit the circle of the rope, the other end large enough to carry two or three pounds of the graphite grease. The rope traveling through this tube will coat itself nicely, one coating in two weeks is enough, and this practice alone will double the length of life of the rope.

The graphite prevents the wire from rusting; it saves the rope from abrasion when striking hard substances; it also prevents the wires, forming the rope, from abrasion one against the other, as the graphite finds its way into and fills the minutest spaces and is held there by the fatty substances in the mixture. The facts above are furnished, from his own experience, by one of the leading mining engineers of the country.—*Iron Trade Review.*

A remarkable subterranean waterway was discovered recently at the Salamonic stone quarries twelve miles north of here. By a system of dykes the course of the Salamonic river has been changed and the quarries underlie the old bed of the stream about 40 feet below it. Recently the foreman discovered a stream of water twelve feet wide and six deep, the stiff current of which was at right angles to the course of the river. The next layer of rock will completely uncover the subterranean watercourse. The quartz in several places shows the effects of violent volcanic action and from the formations in the vicinity there is thought to be a cave of which the stream is the outlet. Five miles west there is a lake of great depth which it is thought gets its supply by subterranean inlets.

LAKE FREIGHTS.

Cleveland, May 15.

Although freight rates in all lines of trade on the lakes are low there is encouragement in the way in which ore shippers are rushing down their product. The demand for tonnage is more than equal to the supply and one boat, the propeller Samoa, was chartered yesterday at 95 cents from Escanaba to Erie. The inquiry for coal tonnage shows some improvement and Sandusky shippers are offering 45 cents to the head of Lake Superior, but a sufficiency of boats is still found here at 40 cents. The schooner Ahira Cobb, an exception, gets 45 cents to Duluth.

Chicago, May 15.—A fair business was done in freights. Rates are steady, oats, at 1½ cents; To Ogdensburg,—corn and oats at 4½ cents and and 3½ cents respectively. To Kingston—corn, 4 cents. To Port Huron—oats, 1½ cents.

Buffalo, May 15.—Coal freights are quiet and steady. There was a fair demand for Lake Michigan tonnage. Charters, for Chicago at 45 cents; for Milwaukee, 45 cents; for Duluth, on owners' account; for Marquette, private terms. The Saginaw Valley brings pig iron here from Elk Rapids at $1.25 per ton.

LITERARY NOTICES.

Swimming and life saving is the title of a work recently forwarded to this office from Toronto, Ont. The author Captain W. D. Andrews, G. C. U. of the Dominion of Canada life saving service, gold life saving medallist of the first class, medallist of the Royal Humane Society etc., is a man well qualified to handle the subject, and a perusal of his valuable work amply justifies this assertion. No youth living within ten miles of a sheet of water ought to be without this book, from which he could learn more in ten minutes about conducting himself in the water than he could acquire in half a lifetime without it. The various methods of propulsion, floating and diving are thoroughly explained and we take a sincere pleasure in welcoming so valuable an exponent of acquatic sport in the records of marine literature.

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which sells direct to the consumers at manufacturer's prices, thereby saving two profits, with which they are taxed in any other retail store,

☞ *Genuine Home made Shirts,* ☜ all 54 inches wide, 40 inches long, full sleeves, extra well sewed, from the cheapest 50 cent cotton shirt to all kinds of *Flannel Waterproof Cassimere* Shirts, is conducted by the well known Boston Dry Goods Store, of Kohn & Co., 213 Detroit street, 2d door from corner Pearl street.

Through a Government order, supplying Life Saving Stations with genuine Regulation SAILOR SHIRTS, we are the only Shirt factory in Cleveland who procure the ☞ real U. S. Navy Flannels, ☜ guaranteed never to shrink nor to fade, and have them constantly on hand *ready made* or made to the customers' order without any extra charges.

All our ☞ *own Home made Shirts* ☜ if not suited after purchased, can be returned and we make others *to order* ☜ instead. The same rule applies to all ☞ our own Home made ☜ Overalls, Jumpers and Kentucky Pants.

Kohn & Co.'s Shirt factory, 213 Detroit street, 2d door from corner Pearl, Cleveland, O

Proposals for steam barge.—U. S. Engineer Office, Buffalo, N. Y., May 1, 1889. Sealed proposals in triplicate will be received at this office until 12 M., eastern standard time, June 3, 1889, for chartering a steam barge to the United States to be used at Erie harbor, Pa. Attention is invited to the acts of congress approved February 26, 1885 and February 23, 1887, Vol. 23 page 332 and Vol. 24 page 414, statutes at large. Specifications, blank forms of proposals and all necessary information can be had from M. J. C. QUINTUS, Erie, Pa., or from the undersigned.
F. A. MAHAN, Captain of Engineers.

Proposals for tug and scow.—U. S. Engineer Office, Buffalo, N. Y., May 1, 1889. Sealed proposals in triplicate will be received at this office until 12 M., eastern standard time, June 3, 1889, for chartering to the United States for use at Erie harbor, Pa., a tug, scow and dump scows. Attention is invited to the acts of congress approved February 26, 1885, and February 23, 1887, Vol. 23 page 332, and Vol. 24 page 414, statutes at large. Specifications, blank forms of proposals and all necessary information can be had from Mr. J. C. QUINTUS, Erie, Pa., or from the undersigned.
F. A. MAHAN, Captain of Engineers.

FOR SALE.

$4,000 Will buy the tug Eliza J. Redford, of Oswego, N. Y. Length 66 feet, beam 14 feet; non-condensing engine, 18-inch diameter, 19-inch stroke. A decided bargain. Inquire of D. P. LESTER, Oswego, N. Y.

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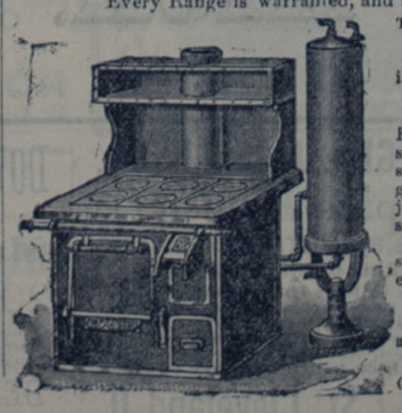

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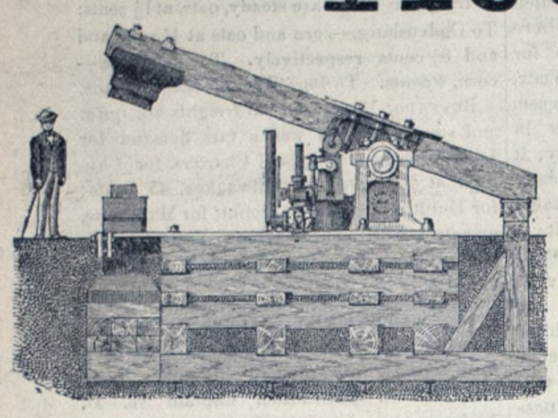

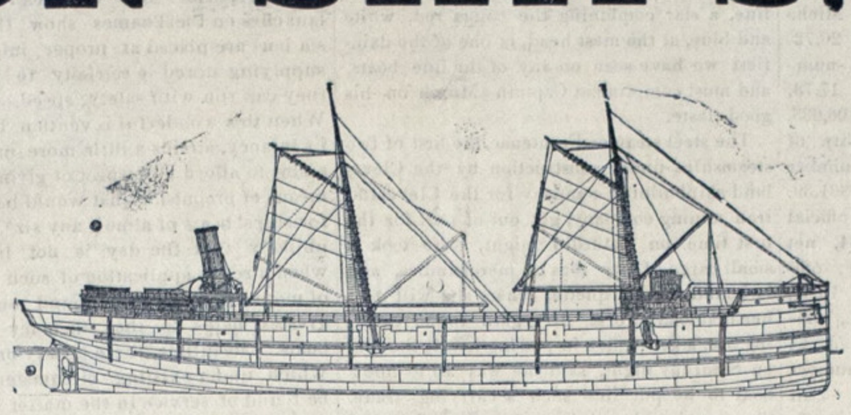

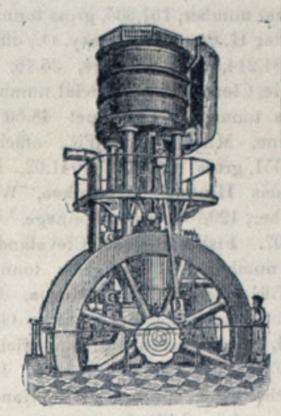

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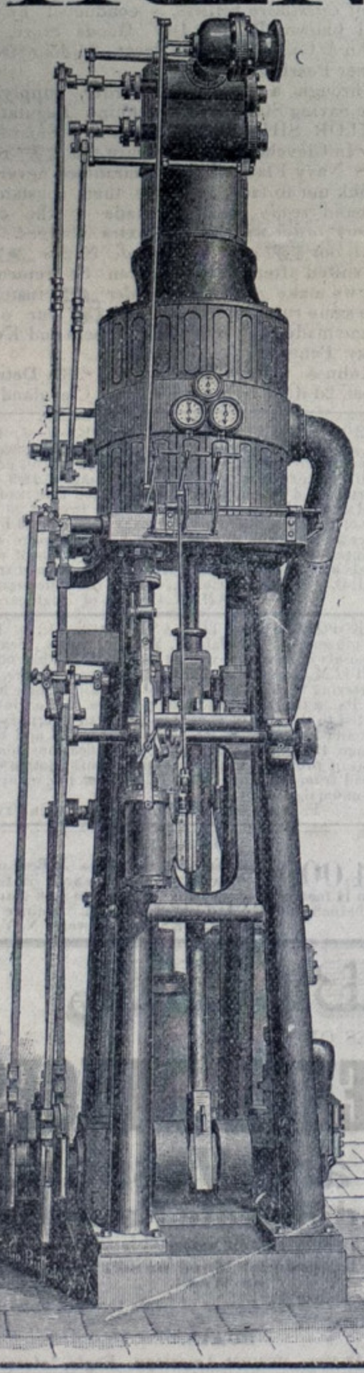

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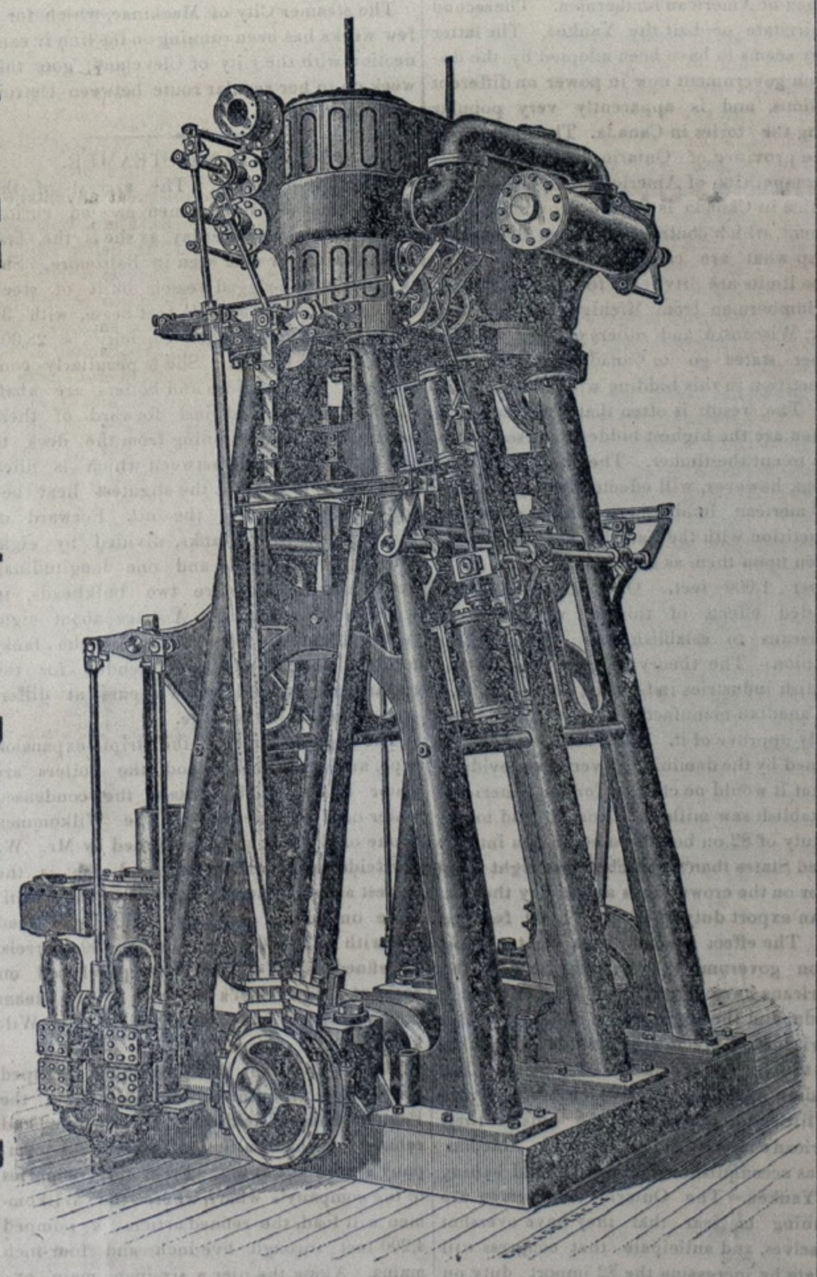

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HARBOR TUG for sale. Engine 18x20, boiler 5 feet 6 inches by 11 feet, and allowed 100 pounds of steam, and is A2, valued at $5,500 by Lloyd's register, but the owner will take $5,000 cash. For further particulars inquire at 113 Franklin avenue, Cleveland, O.

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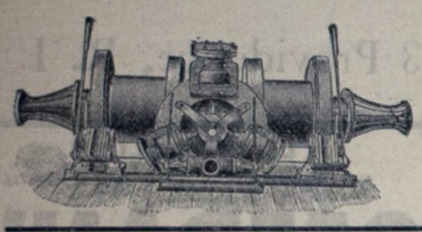

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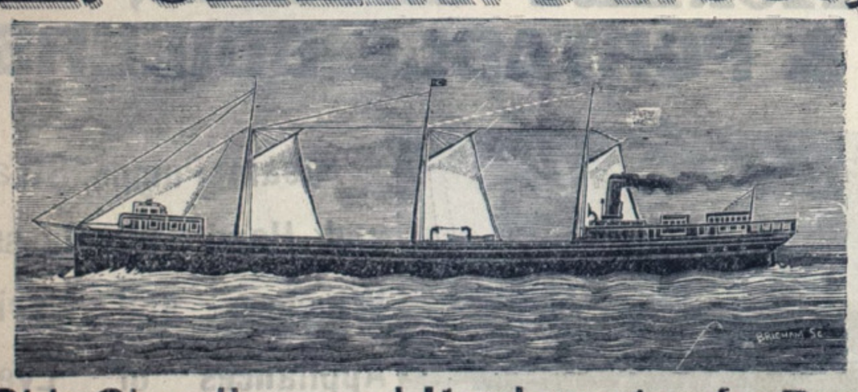

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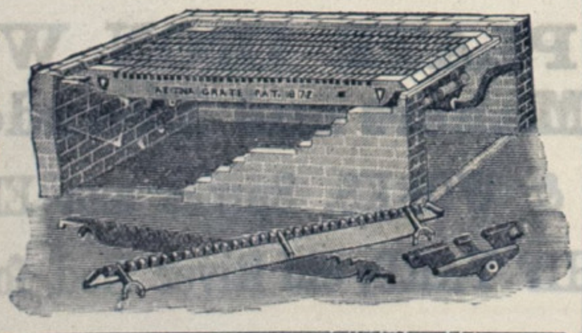

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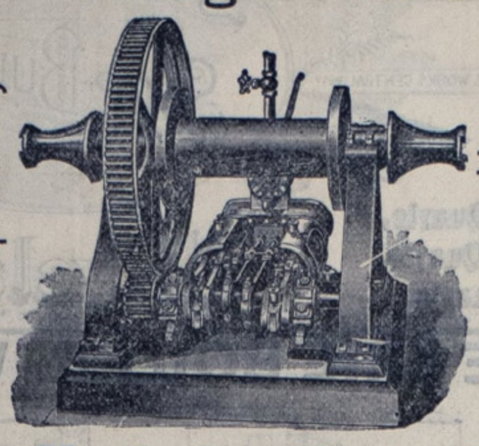

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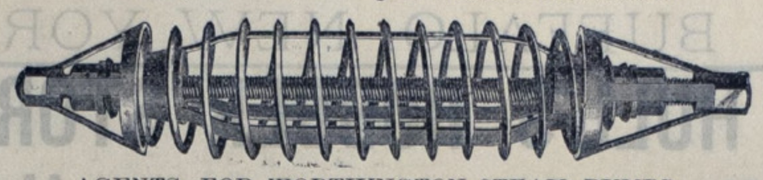

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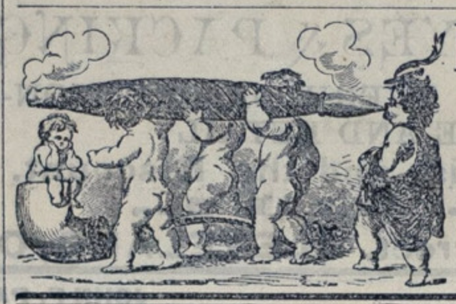

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By referring to the accompanying illustrations owners and masters of vessels cannot fail to appreciate the great advantage of this device, which at once fills a long felt want Safety, speed, and its being non-intricate, make it a veritable boon to mariners.

These hooks have been thoroughly tested with entire satisfaction, and may be seen in practical use on steamers Samuel Mather, Progress, Lackawanna, schooners Golden Age, Wadena, Fayette Brown, Thomas Quayle, Warner, Annabel Wilson, Ahira Cobb, H. A. Kent, Henry A. Hoag, Galatia, Alva Bradley, Ogarita, Hattie Wells, S. A. Irish, Sumatra, Montgomery and John O'Neil.

We ask attention of our readers to the Standard self-detaching davit fall hook as advertised in the columns of this paper, and we are pleased to note that the master of the Sumatra, who has just been supplied with a set of these hooks, writes to the inventors as follows:

PORT HURON, April 19.

Mr. G. W. Learman, Cleveland, Ohio.

Dear Sir.—I am happy to inform you that the patent self detaching hooks you furnished the Sumatra this spring are all, and more than you represent them to be; they worked very successfully with the vessel going at the rate of seven miles an hour. I shall recommend your hooks to any and every one of my acquaintances in the vessel line. Yours, etc. (Signed) W. E. RUSSEL, master of the Sumatra.

Sold by ship chandlers. Address

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J. C. GOSS.

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THE FINE FREIGHT AND PASSENGER Steamers—

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Rating, A2: Well and thoroughly equipped for the business. For particulars and terms apply to LAKE MICHIGAN & LAKE SUPERIOR TRANS. CO., Cor. Rush and North Water Sts., Chicago, Ill.

The Cleveland Vessel Owners' association is prepared to receive applications for admission for 1889, on same terms as last year, viz.: 3 cents per ton on steamers, and 4 cents on sail and consort; old custom house register. The time during which tonnage may be admitted expires May 15th, but it is desirable that all crafts intending to come in should apply before the opening of navigation, and have the benefits of the entire season. Address,

B. L. PENNINGTON, Sec'y,

112 Water St, Cleveland, Ohio.

MARITIME LAW.

DAMAGES—MEASURE OF—WHARFAGE DEMURRAGE—EVIDENCE TO ASCERTAIN—STIPULATION OF CHARTER PARTY.

U. S. District Court, Southern District of New York.

1. A charge for wharfage as an expense made necessary by collision is a proper item of damage, and if not included in the demurrage charge, should be allowed as a separate item.

2. The stipulations of a charter as to the rate of demurrage is not competent legal evidence in favor of the ship owner, in an action brought by him, against third persons, for damages by collision.

3. The amount to be allowed for the detention of a vessel is the value of her use, and evidence of the expenses of the voyage and the time it had taken, including loading and unloading, is competent evidence to show the net value of the vessel per day.

4 Forty dollars per day demurrage for a bark of 740 tons register, held, a fair and just allowance.

Exceptions to Commissioner's Report.

As the bark Maria Margaretha was lying at anchor ready for sea she was injured in collision by the respondent's vessel. She had been chartered for a voyage from New York to Callao, and in consequence of the collision was obliged to put back to New York and report for repairs. The damages have been assessed by the commissioner at $1451.30, besides interest, including demurrage for 14 days, at the rate of $40 per day.

The charter provided for demurrage at the rate of 4d per ton per day, amounting to $59.70 per day. The claimants, to prove the value of the use of the vessel, gave evidence of the expenses of the voyage, the time it had taken, including loading and unloading, showing that the net value of the vessel per day was less than $30. The amount paid by the vessel for wharfage during the detention caused by the collision amounted to $40.10. Both sides filed exceptions.

BROWN, J.

The charge for wharfage as an expense made necessary by the collision should have been allowed. Where the charter rate of demurrage is adopted, and that rate is shown to include the charge for wharfage, it is of course disallowed, as an additional item. The C. P. Raymond, 28 Fed. Rep 765. As the charter rate of demurrage was not in this case adopted by the commissioner, the wharfage should have been allowed; and undoubtediy was only omitted by accident.

The stipulations of a charter as to the rate of demurrage is not, I think, competent before evidence in favor of the owner, in an action brought by him against third persons, for damages by collision. Such stipulations are res inter alios octæ, and are not necessarily based on the supposed value of the vessel alone. Upon this point, the commissioner justly observes that "though the rate of 4d. per ton is customary in these charter parties it is probably in many cases a liberal estimate, somewhat in the nature of a penalty, which the charterer can avoid by the exercise of diligence."

The damages in collision cases are to be fixed upon the basis of restitus in integrum. The amount to be allowed for the detention of the vessel is the value of her use. Williamson v. Barrett, 13 How. 101. The Potomac 105 U. S. 631. But the stipulations of a charter with third persons, when offered by the owner in his own favor, is no better than the owner's declarations; which, though competent against him, are not legal evidence in his own behalf. (The Herman, 4 Blatch, 441).

For the same reason the customary rate fixed by the regulations of the produce exchange of this city are not of themselves competent evidence.

On examination of the testimony I am satisfied that the commissioner properly took into consideration the claimant's evidence as respects the value of the use of the vessel. This evidence was competent. The Potomac, supra: The Herione, 1 Ben. 227. Taking into account all the expenses of the ship and crew, the necessary repairs, and the ordinary depreciation upon her voyages, I think the sum of $40 per day for this bark of 740 tons register, a fair and just allowance

Although the rate charged by the stevedore was somewhat higher than in ordinary cases, in view of the special circumstances which affected the reason ableness of the charge, the commissioner's conclusion should not be disturbed.

Some additional charges for an unnecessary third captain as surveyor, an unreasonable allowance to the diver, and a brokerage charge in addition to the usual percentage of 5 per cent, should have been disallowed. The case of the Williams (15 Fed. Rep. 558) is not applicable to an expense actually and necessarily incurred by the vessel. These together offset the sum of $40.10 that should have been allowed for wharfage.

The other exceptions I cannot sustain.

The amount reported should, therefore, stand without change. By the practice of this court interest is allowed, and the report should, therefore, be confirmed. I cannot find that the litigation has been so unreasonable as to change the preuious ruling,

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The work of placing buoys along Superior channel was begun Friday morning. It is proposed to profit by past experience and put in buoys that will not be carried out by ice. There will be 22, each attached to a strong rope and secured to bottom by heavy weights.

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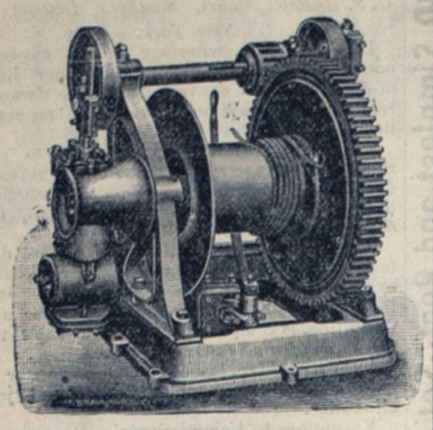

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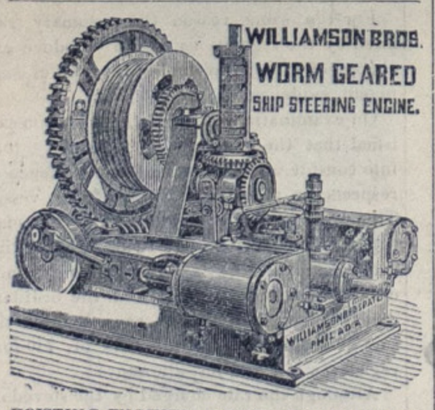

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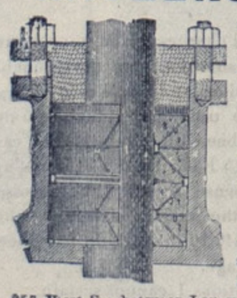

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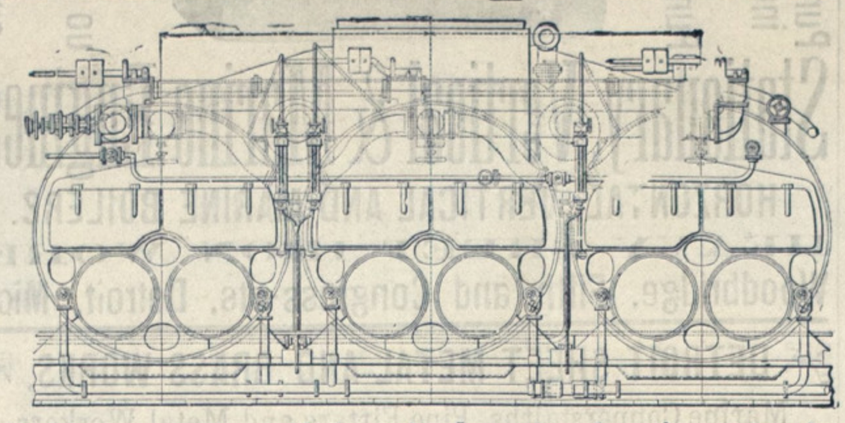

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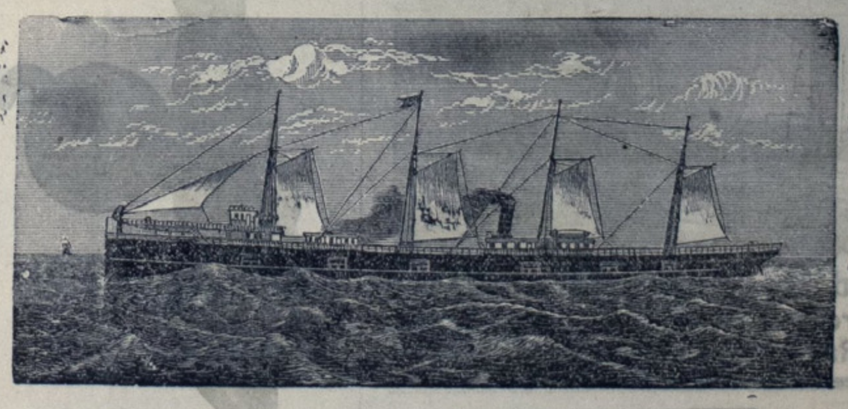

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